



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/309,130	05/10/1999	MICHAEL E. RAKAUSKAS	28572/32531A	7131

7590 10/14/2003
ROPES & GRAY
PATENT GROUP, 33RD FLOOR
ONE INTERNATIONAL PLACE
BOSTON, MA 02110-2624

EXAMINER

KRUER, KEVIN R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s) N .

09/309,130

Applicant(s)

RAKAUSKAS

Examiner

Kevin R Kruer

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on July 23, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 17-25 and 37-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-25 and 37-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION
Claim Objections

1. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 states that the saturating resin comprises melamine. Claim 17, from which claim 18 depends, already states that the saturating resin comprises melamine.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. The rejection of claims 53 and 54 under 35 U.S.C. 102(b) as being anticipated by Boggs (US 3,677,868) has been rendered moot by Applicant's amendments. Specifically, Applicant has canceled claims 53 and 54. Now, all claims are drawn to a laminate wherein a veneer "is disposed on only one of" the sheet layers.

Claim Rejections - 35 USC § 103

3. Claims 37-41, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747) for reasons of record.

With respect to the newly added method limitation of claim 37, the courts have held that process limitations do not patentably distinguish a product claim from a product taught in the prior art unless it can be shown that the claimed method limitations inherently results in a patentably distinct product. The examiner contends that the

Art Unit: 1773

product taught by Baymiller in view of McClain reads on the presently claimed product because the product taught by the references comprises the same layers in the same relative order as the claimed laminate.

4. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 37-41, and 48, above, and further in view of Guyette (US 5,425,986) for reasons of record.

5. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 37-41, and 48, above, and further in view of Guyette (US 5,425,986) for reasons of record.

6. Claims 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747), as applied to claims 36-41, and 48 above, and further in view of Brooker et al. (US 5,723,221) for reasons of record.

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view McClain (US 1,299,747), as applied to claims 37-41, and 48 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308) for reasons of record.

8. Claims 37-41, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236) for reasons for record.

With respect to the newly added method limitation of claim 37, the courts have held that process limitations do not patentably distinguish a product claim from a product taught in the prior art unless it can be shown that the claimed method limitations

inherently results in a patentably distinct product. The examiner contends that the product taught by Molloy in view of Baymiller reads on the presently claimed product because the product taught by the references comprises the same layers in the same relative order as the claimed laminate.

9. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 37-41, and 48 above, and further in view of Guyette (US 5,425,986) for reasons of record.

10. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 37-41, and 48 above, and further in view of Guyette (US 5,425,986) for reasons of record.

11. Claims 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 37-41, and 48 above, and further in view of Brooker et al. (US 5,723,221) for reasons of record.

12. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236), as applied to claims 37-41, and 48 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308) for reasons of record.

13. Claims 17-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747) and Brooker et al. (US 5,723,221). Baymiller teaches a veneered or laminated board structure comprising a wood core, a crossbanding material and a wood veneer (abstract). The core stock may comprise, for example, lumber or chip board (col 1, line 13). The crossbanding material comprises a resin-saturated sheet. The layers are assembled within a press, and

Art Unit: 1773

subjected to pressure and elevated temperature in order to cure the resin (col 2, lines 28-38). The laminate has considerable dimensional stability and resists warping and cracking of the veneer.

Baymiller teaches a laminate comprising a crossbanding material between a wood core and veneer wherein the crossband comprises a felt material saturated with urea formaldehyde. Baymiller preferred crossband does not comprise a resin saturated kraft paper. However, Baymiller teaches that International Paper Company has made a urea formaldehyde resin saturated kraft paper sheet that could be used for crossbanding (col 1, lines 30-37). The courts have held the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness. *Sinclair & Carroll Co. V. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the crossbanding material made by International Paper Company in place of the crossbanding material taught in Baymiller.

Baymiller also does not teach that a saturated resin sheet should be applied to the non-veneered surface of the substrate. However, McClain teaches that saturated paper products may be applied to the non-veneered surface of a wood laminate in order to provide moisture, oil and acid resistance (col 4, lines 115+). The sheets are impregnated with a suitable adhesive (col 3, line 64). It would have been obvious to one of ordinary skill in the art to apply a resin saturated paper sheet to the non-veneered surface of the laminate taught in Baymiller in order to provide oil, water, and acid resistance to the laminate.

Neither Baymiller nor McClain teaches that the impregnated resin should comprise melamine. However, Brooker teaches that melamine aldehyde and urea formaldehyde resins are used interchangeably as adhesives to saturate paper sheets utilized in high or low-pressure decorative laminate processes (col 3, lines 3+). The courts have held that substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency. *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 84 USPQ 328 (USSC 1950). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a melamine resin in place of the urea formaldehyde resin taught in Baymiller because Brooker acknowledges that urea formaldehyde and melamine may be used as functional equivalents for saturating paper sheets utilized in low and high pressure decorative laminates.

With respect to claim 19, Brooker teaches that a variety of fillers may be added to the adhesive (col 2, lines 8+) in order to improve the laminate's processing and/or properties. Therefore, it would have been obvious to add filler to said melamine resin in amounts sufficient to improve the laminate's processing and/or properties.

With respect to claim 20, Baymiller does not teach that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously affect the adhesion of the laminate.

With respect to claim 21, the courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any ratio in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747) and Brooker et al. (US 5,723,221), as applied to claims 17-21 and 24 above, and further in view of Guyette (US 5,425,986) for reasons of record.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747) and Brooker et al. (US 5,723,221), as applied to claims 17-21 and 24 above, and further in view of Guyette (US 5,425,986) for reasons of record.

16. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of McClain (US 1,299,747) and Brooker et al. (US 5,723,221), as applied to claims 17-21 and 24 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308) for reasons of record.

17. Claims 17-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236) and Brooker et al. (US 5,723,221). Molloy teaches a laminated panel comprising a core, two crossbanding sheets, and a facing sheet (abstract). The core may comprise wood, lumber, or chips (col 3, line 58). The back sheet of the laminate may comprise a crossbanding sheet (col 3, lines 7 and 8). The layers of the laminate are placed in a press under heat and pressure to cure the resin in the crossbanding sheet (col 2, lines 15-24).

Molloy teaches a laminate comprising a crossbanding material between a wood core and veneer, but does not does not comprise a resin saturated kraft paper. However, Baymiller teaches that International Paper Company has made a urea formaldehyde resin saturated kraft paper sheet that could be used for crossbanding (col 1, lines 30-37). The courts have held the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness. *Sinclair & Carroll Co. V. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the crossbanding material made by International Paper Company in place of the crossbanding material taught in Molloy.

Neither Molloy nor Baymiller teaches that the impregnated resin should comprise melamine. However, Brooker teaches that melamine aldehyde and urea formaldehyde resins are used interchangeably as adhesives to saturate paper sheets utilized in high or low-pressure decorative laminate processes (col 3, lines 3+). The courts have held that substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency. *In re Fount* 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.* 84 USPQ 328 (USSC 1950). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a melamine resin in place of the urea formaldehyde resin taught in Baymiller because Brooker acknowledges that urea formaldehyde and melamine may be used as functional equivalents for saturating paper sheets utilized in low and high pressure decorative laminates.

With respect to claim 19, Brooker teaches that a variety of fillers may be added to the adhesive (col 2, lines 8+) in order to improve the laminate's processing and/or

properties. Therefore, it would have been obvious to add filler to said melamine resin in amounts sufficient to improve the laminate's processing and/or properties.

With respect to claim 20, neither Molloy nor Baymiller teaches that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously affect the adhesion of the laminate.

With respect to claim 21, the courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any ratio in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

18. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236) and Brooker et al. (US 5,723,221), as applied to claims 17-21 and 24 above, and further in view of Guyette (US 5,425,986) for reasons of record.

19. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236) and Brooker et al. (US 5,723,221), as applied to claims 17-21 and 24 above, and further in view of Guyette (US 5,425,986) for reasons of record.

20. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molloy et al (US 3,916,059) in view of Baymiller (US 3,816,236) and Brooker et al. (US

5,723,221), as applied to claims 17-21 and 24 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308) for reasons of record.

Response to Arguments

Applicant's arguments filed July 23, 2003 have been fully considered but they are not persuasive.

Applicant argues that that Baymiller teaches away from the use of kraft paper as a crossband material. While the examiner concedes that kraft paper is not the preferred crossband material taught in Baymiller, the courts have held that preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. Furthermore, the examiner notes that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments.

Applicant points out that McClain's reasons for adding a resin impregnated fibrous material to the non-veneered surface of the substrate are different than the reasons cited in the application. McClain supplies a resin impregnated fibrous material to the non-veneered surface of a substrate in order to provide surface protection. Similarly, Molloy's reasons for not overlying a crossbanding sheet with a veneer are different than the reasons cited in the application. Molloy utilizes the crossbanding sheet without a veneer in order to obtain a decorative outer surface or as a backing sheet (col 3, lines 3-8). However, the courts have held that the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different

purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant.

McClain is also deficient, according to Applicant, because McClain does not teach that the adhesive utilized should comprise melamine. However, McClain broadly teaches that the adhesive is a material that hardens under heat and pressure (col 1, lines 36+). Brooker teaches that melamine resins have been utilized in the art for such a purpose. Thus, the examiner maintains the position that one of ordinary skill in the art would have been motivated to utilize melamine adhesive in the non-veneered sheet layer.

With respect to Molloy, Applicant argues that there is no guidance to one skilled in the art with respect to warpage. The examiner respectfully disagrees. Crossbanding sheets are utilized in order to "help to overcome" the tendency of the laminate to warp (col 1, lines 7+).

Applicant further argues that there is no suggestion that the resin taught in Brooker would be suitable in the Baymiller product. The examiner respectfully disagrees. Both Baymiller and Brooker utilize the resin to bond together low or high pressure decorative laminates. Since the urea-formaldehyde and melamine are performing the same function, adhesion, in both patents, the examiner maintains the position that one of ordinary skill in the art would have a reasonable expectation of success if melamine was utilized in the product taught by Baymiller.

Applicant argues that the tertiary references not discussed above fail to rectify the deficiencies of the other references. Since the examiner maintains that Baymiller in

Art Unit: 1773

view of McClain and Brooker, and Molloy in view of Baymiller and Brooker render obvious the claimed invention, Applicant's arguments are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Art Unit: 1773

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.



Kevin R. Kruer
Patent Examiner



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700